

# [MULTIDIMENSIONAL ADVANCED ADAPTIVE SOFTWARE ARCHITECTURE]

## Abstract of Disclosure

The present invention is a software architecture that provides high versatility and performance. This architecture is composed of two dimensions: the first one belongs in the application level, and the second in the multicore dimension. The application dimension is related to the different applications based in the conceptual model of abstractions exposed in this patent. The multicore dimension is related to the applications dimension instantiated several times in the same computer (multiple processors) or in several computers. All the cores within the multicore dimension are related in order to share information and integrate all the architecture's applications. The multicore architecture avoids bottlenecks in the simultaneous execution of multiple applications on the same computer by means of a large virtual core composed of small interconnected cores. The conceptual model of abstractions is composed of various drivers, abstraction layers and a unique core that provides support by playing a referee role between different extensions of an application.